



[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

**Office of Commercial Space Transportation
Safety Approval Performance Criteria**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notification of criteria used to evaluate the Black Sky Training, Inc. (BST) safety approval application.

SUMMARY: The FAA issued BST a safety approval, subject to the provisions of Title 51 U.S.C Subtitle V, ch. 509, and the orders, rules and regulations issued under it. Pursuant to Title 14 Code of Federal Regulations (14 CFR) §414.35, this Notice publishes the criteria that were used to evaluate the safety approval application.

BACKGROUND: BST applied for, and received, a safety approval for its ability to provide as a service, scenario based physiology training, which includes hypobaric chamber training. BST may offer its scenario based physiology altitude training as a service to a prospective launch and reentry operator to meet the applicable crew and participant training requirements of 14 CFR § 460.5 and 14 CFR § 460.51.

CRITERIA USED TO EVALUATE SAFETY APPROVAL APPLICATION:

The performance criteria for this safety approval include 14 CFR §61.31(g) for additional training required for operating pressurized aircraft capable of operating at high altitudes. These criteria are FAA regulations, which are acceptable technical criteria for reviewing a safety approval application per 14 CFR 414.19(a)(1). The FAA's evaluation included assessment of BST's scenario based physiology training lesson plan and objectives, which include classroom and hypobaric chamber training for crew and space flight participants to experience and demonstrate knowledge of the following through testing:

- Understand fundamental principles of the atmosphere and how it relates to the human body.
- Understand the fundamentals of respiratory physiology and how it relates to hypoxia.
- Show competence in the identification of the many different symptoms and physical signs of hypoxia.
- Show advanced competence in the phenomena of neurological impairment (time of useful consciousness) due to hypoxia.
- Understand the effects of prolonged oxygen use.
- Understand the difference between decompression illness and hypoxia.

- Demonstrate using different scenarios the difference between slow decompression and rapid decompression.
- Identify personal symptoms of hypoxia and demonstrate donning of oxygen mask and ability to perform within a hypobaric chamber.

FOR FURTHER INFORMATION, CONTACT: For questions about the performance criteria, you may contact Randal Maday, Licensing and Evaluation Division (AST-200), FAA Office of Commercial Space Transportation (AST), 800 Independence Avenue SW, Room 331, Washington, DC 20591, telephone (202) 267-8652; E-mail randal.maday@faa.gov.

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Commercial Space Transportation

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